

Advanced Studies in Theoretical Physics 2015 vol.9 N16, pages 811-820

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# On completeness of the system of eigenfunctions of the dirichlet problem for lame equations in the strip

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## Abstract

© 2015 Nikolai Pleshchinskii, Kristina Stekhina and Dmitrii Tumakov. In the present work, the Dirichlet problem for Lamé equations in the strip is considered. A characteristic equation for the problem is obtained. It is shown that the characteristic equation has a denumerable number of simple roots. The conclusion is drawn that any solution to the considered problem can be represented in the form of an eigenfunction series.

<http://dx.doi.org/10.12988/astp.2015.51099>

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## Keywords

Completeness, Dirichlet problem, Lamé equations, System of eigenfunctions